



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------------|------------------------|
| 10/799,098 | 03/12/2004 | Holger Edinger | A-3930 | 7618 |
| 24131 7590 07/16/2007 LERNER GREENBERG STEMER LLP P O BOX 2480 HOLLYWOOD, FL 33022-2480 | | | | |
| | | | EXAMINER MORRISON, THOMAS A | |
| | | | ART UNIT 3653 | PAPER NUMBER |
| | | | MAIL DATE 07/16/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---------------------------------------|--|--|
| Office Action Summary | Application No. 10/799,098 | Applicant(s) EDINGER, HOLGER | |
| | Examiner Thomas A. Morrison | Art Unit 3653 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/30/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 and 6-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,522,388 (Heine et al.).

Regarding claim 1, Fig. 6 of Heine et al. discloses a method for guiding sheets to a sheet processing machine, which comprises the step of:

generating an overlapping stream of sheets (column 6, lines 34-37) guided over a table (table shown in Fig. 6) in a sheet transport direction (sheet movement arrow in Fig. 6);

reducing an adhesion force (e.g., reducing adhesion via element 80) between two sheets following one another in the overlapping stream by lifting a sheet trailing edge of a first sheet. See also column 6, lines 54-60.

Regarding claim 2, Fig. 6 shows lifting the sheet trailing edge of the first sheet by blowing under from behind the sheet. See also column 6, lines 54-60.

Regarding claim 3, column 6, lines 50-60 disclose aligning the first sheet in a sheet transport direction before the sheet trailing edge of the first sheet is lifted.

Regarding claim 6, Fig. 6 discloses an apparatus for guiding sheets to a sheet processing machine, the apparatus comprising:

a lifting device (including 80) for reducing an adhesion force between two sheets following one another in an overlapping stream by lifting a sheet trailing edge of a first sheet, the lifting device (including 80) disposed above the first sheet of the overlapping stream, the lifting device (including 80) being an air jet aimed in a sheet transport direction (sheet movement arrow in Fig. 6) substantially tangentially over the first sheet of the overlapping stream.

Regarding claim 7, Fig. 6 discloses a front edge alignment device (including 13), the lifting device (including 80) being disposed at a distance of a sheet length to be processed from the front edge alignment device (including 13).

Regarding claim 8, column 7, lines 9-15 disclose that the lifting device (including 80) can be adjusted in a sheet transport direction to a sheet format to be processed. In particular, while the element 80 of Heine et al. is being rotated (i.e., the angle is adjusted) one component of its movement is in the sheet transport direction, which meets the limitations of the claim.

Regarding claim 9, Fig. 6 shows that the lifting device (including 80) has at least one nozzle.

Regarding claim 10, Fig. 6 shows that the nozzle is aligned tangentially with respect to a surface of the overlapping stream. More specifically, in as much as Fig. 4

of the instant application shows a nozzle aligned tangentially with respect to a surface of an overlapping stream, so does Fig. 6 of Heine et al.

Regarding claim 11, Fig. 6 shows that the nozzle is aimed in a sheet transport direction.

Regarding claim 12, Fig. 6 and column 7, lines 2-9 disclose that the nozzle is formed as a blowing/suction nozzle and can be acted on with blown air.

Regarding claim 13, column 7, lines 2-9 disclose that the nozzle is formed as a suction gripper. Also, the recitation "can be acted on with a vacuum" does not require that the nozzle actually be acted on with a vacuum. Rather, the nozzle can be acted on with a vacuum. It is the examiner's position that the nozzle (80) can be acted on with a vacuum, e.g., by connecting a vacuum line to such nozzle (80).

Regarding claim 14, column 6, lines 44-46 disclose that the lifting device has a free jet nozzle in addition to the nozzle (80), the free jet nozzle being aimed at the overlapping sheet stream obliquely from above in a sheet transport direction. More specifically, column 6, lines 44-46 disclose that multiple nozzles are provided which can be considered a nozzles and free jet nozzles, as claimed.

Regarding claim 15, column 6, lines 50-60 explain the cycle rate. Thus the nozzle and the free jet nozzle (i.e., the multiple nozzles) of column 6, lines 44-46 can be activated at a cycle rate of the sheet processing machine, as claimed.

Regarding claim 16, Figs. 5c and 6 disclose a printing press (column 1, lines 13-15), comprising:

a sheet stack feeder (unnumbered belts in Fig. 6);

a first lifting apparatus (including 20 in Fig. 5c) for forming an overlapping stream and disposed adjacent the sheet stack feeder (unnumbered belts in Fig. 6); and

a second lifting apparatus (including 80) disposed above a first sheet of the overlapping stream, the second lifting apparatus (including 80) being an air jet aimed in a sheet transport direction substantially tangentially over the first sheet of the overlapping stream.

2. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,522,388 (Heine et al.).

Regarding claim 16, Figs. 5c and 6 disclose a printing press (column 1, lines 13-15), comprising:

a sheet stack feeder (unnumbered belts in Fig. 6);

a first lifting apparatus (including the cam lifting apparatus shown in Fig. 3) for forming an overlapping stream and disposed adjacent the sheet stack feeder (unnumbered belts in Fig. 6); and

a second lifting apparatus (including 80) disposed above a first sheet of the overlapping stream, the second lifting apparatus (including 80) being an air jet aimed in

a sheet transport direction substantially tangentially over the first sheet of the overlapping stream.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,522,388 (Heine et al.) as applied to claim 3 above, and further in view of U.S. Patent No. 4,886,261 (Jeschke). U.S. Patent No. 4,522,388 (Heine et al.) discloses all of the limitations of claim 4, except for aligning the first sheet laterally at a same time as the sheet trailing edge of the first sheet is lifted (e.g., lifted via element 80 of U.S. Patent No. 4,522,388 (Heine et al.)).

The Jeschke patent discloses that it is well known to align a sheet laterally using side walls (including 8 and 9) that extend vertically above the topmost sheet of a stack of sheets, for the purpose of keeping the sheets laterally aligned. See e.g., column 5, lines 10-61 and Fig. 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus shown in Fig. 6 of U.S. Patent No. 4,522,388 (Heine et al.) with side walls for the purpose of keeping the sheets laterally aligned, as taught by Jeschke. Providing such walls on the device in Fig. 6 of U.S. Patent No. 4,522,388 (Heine et al.) in a manner as taught by Jeschke will result in an arrangement that will align the first sheet laterally at a same time as the sheet trailing

edge of the first sheet is lifted (e.g., lifted via element 80 of U.S. Patent No. 4,522,388 (Heine et al.)).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heine et al. as applied to claim 3 above, and further in view of U.S. Patent No. 3,624,807 (Schwebel).

Regarding claim 5, the Heine et al. patent discloses all of the limitations of claim 5, except for aligning the first sheet laterally after the sheet trailing edge of the first sheet is lifted.

Fig. 2 of Schwebel shows that it is well known to provide a sheet conveying apparatus with a plurality of nozzle assemblies (6, 7, 8 and 9) and spaced-apart side stops (4) for the purpose of aligning side edges of conveyed sheets. More specifically, Fig. 2 of Schwebel shows that the side stops (4) are positioned such that sheets enter the region where the nozzle assemblies (6, 7, 8 and 9) are located and such sheets are acted on by the nozzle assemblies (6, 7, 8 and 9) before coming into contact with one of the side stops (4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the Heine et al. apparatus with side stops for the purpose of aligning side edges of sheets conveyed on the Heine et al. apparatus, as taught by Schwebel. Positioning side stops on the Heine et al. apparatus in a manner as taught by Schwebel will result in the side stops being spaced away from incoming sheets such that the incoming sheets are laterally aligned after the sheet has already been acted upon by the nozzles (i.e., after the trailing edge has been lifted by the nozzle (80) of Heine et al.). Thus, all of the limitations of claim 5 are met.

Response to Arguments

5. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

7/8/2007



PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600